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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/988,527	11/20/2001	Jean-Pierre Mao	034299-364	8860

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EXAMINER	
SEFCHECK, GREGORY B	
ART UNIT	PAPER NUMBER
2419	

MAIL DATE	DELIVERY MODE
10/24/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/988,527	MAO, JEAN-PIERRE	
	Examiner	Art Unit	
	GREGORY B. SEFCHECK	2419	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 August 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date. _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

- Applicant's Request for Continued Examination filed 8/11/2008 is acknowledged.
- Claims 1-3 have been amended.
- The previous objection to claim 3 is withdrawn in light of the amendment.
- Claims 1-3 remain pending.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robins et al. (US006430184B1), hereafter Robins.

- In regards to Claims 1 and 2,

Robins discloses a process and device for communicating data packet flows, including Asynchronous Transfer Mode (ATM; Abstract; Col. 1, line 27; claim 1,2 – process/device for deterministic transmission of asynchronous data in packets).

Referring to Figs. 1 and 2, data is received from the Quad PHY 1 physical interface at MOM 1 chip 10 (input module) and then stored in one of a plurality of FIFOs managed by Queue Manager 30 (QM; packeting module; Col. 5-6, lines 43-23; Col. 14, lines 15-28; claim 1,2 – receiving data at input module and storing digital data conveyed

on continuous and cyclic messages arriving in a totally asynchronous manner in FIFOs connected to one or more non-selfsustaining packeting modules).

Robins further discloses Forwarding Engine 40 that provides instructions to the QM for packeting based upon received headers, which are added to the packets before transmitting them out so they may be recovered in their predefined order (sorting and enhancement data; Col. 7, lines 8-13; Col. 8, lines 8-57; claim 1,2 – packeting data from FIFOs in a first set of packets in a first packeting cycle according to a predetermined order with sorting and enhancement data; claim 1,2 – recovering one after another of the first packets, in a predefined order, to form a first message; claim 1 - allowing synchronization of start and end of packets in relation to their transmission in the output message such that the timing cycle between storing and outputting is controlled).

Robins discloses a "cut-through" mode of operation in which packeting is ended and the data is transmitted before a complete packet is realized, such that portions of a packet may be transmitted while other portions are still being received (Col. 17, lines 25-45; Col 16, lines 17-64; claim 1,2 – ending packeting cycle; claim 1,2 – forwarding first packets regardless of state of completion of first packeting cycle; claim 1,2 – beginning start of second packeting cycle).

Robins shows that packets are then sent out another port on a Quad PHY 2 (Fig. 1; claim 1,2 – setting/outputting of the message in the electrical format of the protocol used for transmission).

Robins does not explicitly show the "cut-through" mode of operation comprises receiving a request from the message composition module when it needs a packet.

However, the disclosure of Robins shows that the Forwarding Engine 40 is responsible for providing instructions to the QM and MOM for packeting according to the linked-lists of packet descriptors stored in buffers of the QM. Therefore, the instruction (request) to perform packeting in accordance with "cut-through" mode would also come from the Forwarding Engine 40 (message composition module; Col. 7, lines 8-13; claim 1,2 – receiving a request from the message composition module when it needs a packet; claim 1,2 - ending packeting cycle at the request of a message composition module, which controls packeting).

It would have been obvious to one of ordinary skill in the art at the time of the invention to initialize "cut-through" mode in the process and device of Robins through an instruction, or request, from the Forwarding Engine 40. One of ordinary skill in the art would be motivated to do this because the Forwarding Engine 40 is already shown to provide instructions to the QM and MOM for packeting in a standard mode of operation, so any change to the mode of operation should be initiated from Forwarding Engine 40.

3. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Robins in view of Leslie et al. (US005077671), hereafter Leslie.

- In regards to Claim 3,

Robins discloses a process and device for communicating data packet flows that covers all limitations of the parent claim.

Robins does not explicitly disclose the use of the process in data acquisition and real-time processing systems for flight test installation of new airplanes.

The use of the packetization process shown by Robins would be beneficial for data acquisition and real-time processing systems of any type, including those used on airplanes as shown by Leslie (Abstract; Fig. 1; claim 3 – use of claim 1 process in data acquisition and real-time processing systems for flight test installation of new airplanes).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the process of Robins in data acquisition and real-time processing systems, including those used in airplanes, as shown by Leslie, so that portions of data packets can be transmitted while other portions of the packets are still being processed.

Response to Arguments

4. Applicant's arguments filed 8/11/2008 have been fully considered but they are not persuasive.

- In the Remarks on pgs. 4-5 of the Amendment, Applicant contends that Robins does not disclose receiving a request from the message composition module when it needs a packet, as in amended claims 1 and 2. Rather, Applicant cites Robins' disclosure of QM 30 receiving an instruction from RE 40 for packeting according to linked-lists of packet descriptors stored QM 30.
- The Examiner respectfully disagrees. As previously shown in the Response to Arguments of the Office Action filed 10/3/2007 as well as in the above rejections, it is admitted that Robins does not explicitly disclose a message composition module, or receiving a request from the message composition module when it needs a packet. However, the rejection continues to show how Robins' Forwarding Engine 40 acts as a message composition module in that the Forwarding Engine 40 instructs (i.e. requests) processing in "cut-through" mode, which enables transmission of portions of a packet while other portions are still being received. The use of linked lists and packet descriptors in Robins is irrelevant, because those additional elements of Robins has no bearing on the disclosures used in the rejections, based upon the broadest reasonable interpretation of the claimed language. Therefore, the limitations in claims 1 and 2 are shown to be properly met by the disclosure of Robins.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GREGORY B. SEFCHECK whose telephone number is (571)272-3098. The examiner can normally be reached on Monday-Friday, 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gregory B Sefcheck/
Examiner, Art Unit 2419
10-21-2008